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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,584	03/21/2005	Yasushi Toma	2005_0399A	8272

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EXAMINER	
WILKINS III, HARRY D	

ART UNIT	PAPER NUMBER
1795	

MAIL DATE	DELIVERY MODE
09/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,584	TOMA ET AL.	
	Examiner	Art Unit	
	Harry D. Wilkins, III	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *6-10 and 22-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 11-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/21/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in the reply filed on 6 August 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5 and 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobata et al (WO 02/103771) in view of Quentin et al (US 3,689,315).

Kobata et al teach the invention substantially as claimed. The apparatus of Kobata et al included (see figures 1-3 and 5) at least one processing electrode (52), at least one feeding electrode (52) disposed on the same side as the processing electrode with respect to a workpiece (W), a workpiece holder (46) for holding the workpiece and bringing the workpiece into contact with or close to the processing electrode, a power supply (80) for applying a voltage between the processing electrode and feeding electrode, a fluid supply unit (72) for supplying fluid between the workpiece and the processing electrode and an ion-exchange material positioned over one or both of the processing electrode or feeding electrode.

Kobata et al teach using a non-woven fiber mat of ion-exchange material as opposed to using an organic compound having ion-exchange properties bonded to the underlying conductive electrode.

Quentin et al teach (see abstract and cols. 1-3) a method of making an electrode which involved bonding an ion-exchange material to an underlying conductive material. The coated electrode had the advantages of (see col. 3, lines 12-30) no danger of warping of the ion-exchange surface, easier to make planar surfaces and no adhesive which reduces negative Joule effects.

Therefore, it would have been obvious to one of ordinary skill in the art to have substituted the bonded conductive material-ion-exchange material electrode of Quentin et al for the electrode of Kobata et al for at least the purpose of preventing warping of the ion-exchange surface and to reduce non-uniformities due to the Joule effect.

Regarding claims 2-3, Quentin et al teach using sulphonic acid groups on the polymeric backbone. Sulphonic acid groups included a thiol-bond.

Regarding claim 4, Quentin et al teach (see col. 2, lines 48-51) using metal, graphite or glass as the conductive material. Kobata et al suggest (see page 29) using carbon, noble metals (e.g.-platinum) or conductive oxides as the support material.

Regarding claim 5, Kobata et al suggest (see figure 1) using the ion-exchange material over both of the processing electrode and feeding electrode.

Regarding claim 11, Kobata et al suggest (see figure 1) using ultrapure water.

Regarding claim 12, Kobata et al teach (see figure 5) including a driving mechanism as claimed to create relative motion between the workpiece and electrodes.

Regarding claim 13, the relative movement included rotational movement.

Regarding claim 14, the movement was established relative to a front surface of the workpiece which was to be processed.

Regarding claim 15, the apparatus of Kobata et al included an electrode unit (48) as claimed.

Regarding claim 16, Kobata et al suggest (see figure 7) including plural processing electrodes and plural feeding electrodes alternately disposed on the same side of the workpiece.

Regarding claims 17 and 18, Kobata et al suggest (see figures 20 and 21) forming the processing electrode and feeding electrode such that the feeding electrode included a plurality of electrodes arranged at a periphery of, and surrounding, the processing electrode.

Regarding claim 19, Kobata et al suggest (see figure 25) using a plurality of parallel processing electrodes.

Regarding claim 20, Kobata et al suggest (see figures 31 and 33) a substrate processing apparatus including a loading and unloading section (30), an electrolytic processing apparatus as per claim 1 (36), a cleaning device (130) and a transfer device (38 or 38a) as claimed.

Regarding claim 21, Kobata et al suggest (see figure 31) also including a CMP device (112).

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-5 and 11-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 11/076,067. Although the conflicting claims are not identical, they are not patentably distinct from each other because the features of the present claims are disclosed within the claims of the '067 application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D. Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harry D Wilkins, III/
Primary Examiner, Art Unit 1795

hdw